PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Management and outcomes among patients with hard-to-heal ulcers
	in Sweden: a national mapping of data from patients' medical
	records, focusing on diagnoses, ulcer healing, ulcer treatment time,
	pain, and prescription of analgesics and antibiotics
AUTHORS	Oien, Rut; Roxenius, Jenny; Boström, Maria; Wickström, Hanna

VERSION 1 - REVIEW

REVIEWER NAME	Jais, Suriadi
REVIEWER AFFILIATION	The Institute of Technology and Health Muhammadiyah KALBAR,
	Medcial Surgical Nursing
REVIEWER CONFLICT OF	No conflict of interest.
INTEREST	
DATE REVIEW RETURNED	19-Jun-2024

GENERAL COMMENTS	This article is really interesting however there should be a definition
	for wounds that are difficult to heal. Why does the author assess
	wounds that are difficult to heal after 4 to 6 weeks? Meanwhile,
	chronic wounds take at least 12 weeks to heal. A description of the
	wound's degree so that you can determine its severity and predict
	how it will heal. Additional data analysis of the degree of wound is
	required in order to identify wound healing, whether it is difficult or
	heals in accordance with chronic wound conditions.

REVIEWER NAME	Sussman, Geoff
REVIEWER AFFILIATION	Monash University
REVIEWER CONFLICT OF	Nil
INTEREST	
DATE REVIEW RETURNED	02-Jul-2024

GENERAL COMMENTS	This is a very important paper that identifies a major issue with chronic wounds of a lack of a clear diagnosis of the underlying causes of these wounds. These results mirror a similar position in many counties and show how by better education and cause identification wound healing can be significantly improved with considerable savings in health costs.
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REVIEWER NAME	Mosti, G
REVIEWER AFFILIATION	Angiology Department, MD Barbantini Clinic
REVIEWER CONFLICT OF INTEREST	[None indicated].
DATE REVIEW RETURNED	09-Jul-2024

GENERAL COMMENTS	Very well done study. I have just 2 remarks that I hope will be
	addressed:
	1. Why did you include pressure ulcers and ulcer form diabetic foot.
	The diagnosis in these cases is very clear and does not need
	specific diagnosis. The diagnosis is necessary in leg ulcers where
	the pathophysiology is often unclear
	2. It is amazing that so many patients treated in specialist care did
	not receive the diagnosis of their ulcers. The referral to specialist
	care is usually due to really recalcitrant ulcers and I do not see how
	these ulcers can heal if a proper diagnosis is not performed.

VERSION 1 – AUTHOR RESPONSE

Reviewer: 1

Reviewer Name: Dr. Suriadi Jais,

The Institute of Technology and Health Muhammadiyah KALBAR

Dear Dr. Suriadi Jais

Thank you for your valuable comments on our article Swedish national survey of patients with hard-to-heal ulcers, focusing on diagnoses, ulcer healing, ulcer treatment time, pain, and prescription of analgesics and antibiotics.

We have clarified our statements and findings and revised the manuscript accordingly. We have explained how we have tackled the question of an additional data analysis of the degree of wound. You will find our answers below.

Comment 1:

This article is really interesting however there should be a definition for wounds that are difficult to heal.

Comment 2:

Why does the author assess wounds that are difficult to heal after 4 to 6 weeks? Meanwhile, chronic wounds take at least 12 weeks to heal.

Answer to comments 1 and 2:

We have chosen to use the definition that wounds that are difficult to heal are wounds that have not or are not expected to proceed through an orderly and timely reparation to produce anatomic and functional integrity within 4 to 6 weeks.

We have revised the manuscript in Introduction with the following sentence (page 2): A hard-to-heal (formerly chronic) ulcer is defined as a break in the skin which has not healed within 4–6 weeks [1-3].

The definition can also be found in Methods, Design (page 3):

In this study we did not consider acute wounds but hard-to-heal leg, foot, and pressure ulcers. The definition of a hard-to-heal ulcer was an ulcer that had not or was not expected to heal within four to six weeks, and included venous, arterial and arteriovenous ulcers, diabetic foot ulcers, pressure ulcers, traumatic ulcers and atypical ulcers, located on the leg or foot. However, pressure ulcers were not restricted to leg or foot as these can be located anywhere on the body. The chosen diagnoses were retrieved from the National Clinical Practice Guidelines for hard-to-heal ulcers [2].

This definition of a hard-to-heal ulcer was agreed on in a newly published joint document of the Swedish National guidelines, with representatives for Venous disease – varices and venous leg

ulcers, Diabetes with a high risk of foot ulcers, Critical ischemia and Hard-to-heal ulcers. Reference:

National system for knowledge-driven management within Swedish healthcare. Nationellt vårdprogram för svårläkta sår [Internet]. Stockholm: National system for knowledge-driven management within Swedish healthcare; 2023. [Cited 2024 Feb 2]. Available from: Nationellt vårdprogram för svårläkta sår (nationelltklinisktkunskapsstod.se)

Comment 3:

A description of the wound's degree so that you can determine its severity and predict how it will heal.

Comment 4:

Additional data analysis of the degree of wound is required in order to identify wound healing, whether it is difficult or heals in accordance with chronic wound conditions.

Answer to comments 3 and 4:

The aim of our study was to evaluate healing time based on fully healed skin defects, why we did not ask, in the data collection, for the degree of the ulcers. Given the study design with a random sample of units and all their patients during the past year, the wound size and grade should be proportional to and representative of the whole population we are studying.

We thank you for having brought our attention to these important matters in wound management, and we trust that the above explanations will be acceptable to you.

Reviewer: 2

Reviewer Name: Dr. Geoff Sussman, Monash University

Dear Dr Sussman

We appreciate your comments on our article Swedish national survey of patients with hard-to-heal ulcers, focusing on diagnoses, ulcer healing, ulcer treatment time, pain, and prescription of analgesics and antibiotics.

Comment:

This is a very important paper that identifies a major issue with chronic wounds of a lack of a clear diagnosis of the underlying causes of these wounds. These results mirror a similar position in many counties and show how by better education and cause identification wound healing can be significantly improved with considerable savings in health costs.

Answer:

We are especially happy that you recognize our effort to draw attention to a substantial problem in wound management not only in Sweden but worldwide and that you also point to the fact that better education is one key to solve this problem for many patients suffering from hard-to-heal ulcers.

Reviewer: 3

Reviewer Name: Dr. G Mosti, Angiology Department, MD Barbantini Clinic

Dear Dr. G Mosti,

Thank you for your valuable comments on our article Swedish national survey of patients with hard-to-heal ulcers, focusing on diagnoses, ulcer healing, ulcer treatment time, pain, and prescription of analgesics and antibiotics.

We have clarified our statements and findings to address your questions. You will find our answers below.

Comment 1:

Why did you include pressure ulcers and ulcer form diabetic foot. The diagnosis in these cases is very clear and does not need specific diagnosis. The diagnosis is necessary in leg ulcers where the pathophysiology is often unclear.

Answer 1:

Both pressure ulcers and diabetic foot ulcers are included in the Swedish national guidelines [Ref 2] and the Swedish national quality registry for hard-to-heal ulcers [Ref 3], together with leg ulcers.

Without a diagnosis in the medical record, patients with pressure ulcers or diabetic foot ulcers are prevented from receiving optimal pressure relief such as mattresses or specialized shoes for free (or to a lower cost). Even if the diagnosis for patients with pressure ulcers or diabetic foot ulcers might be clear, the impact of having a diagnosis in the medical record is crucial to secure optimal care.

Comment 2:

It is amazing that so many patients treated in specialist care did not receive the diagnosis of their ulcers. The referral to specialist care is usually due to really recalcitrant ulcers and I do not see how these ulcers can heal if a proper diagnosis is not performed.

Answer 2:

It is a surprising and important finding, and we really hope that this study can draw attention to this problem so that healthcare can be improved for these patients.